



The map shows the harbor area of Gloucester, Massachusetts, with various zones outlined in red and green dashed lines. Key locations labeled include Downtown, City Hall, State Fish Pier, Harbor Cove, Western Harbor, Eastern Gloucester, Rocky Neck, and Smith Cove. A 'Designated Port Area' is also marked. The text 'City of Gloucester: Harbor Economic Implementation Recommendations 4/14/2014' is overlaid in the center.

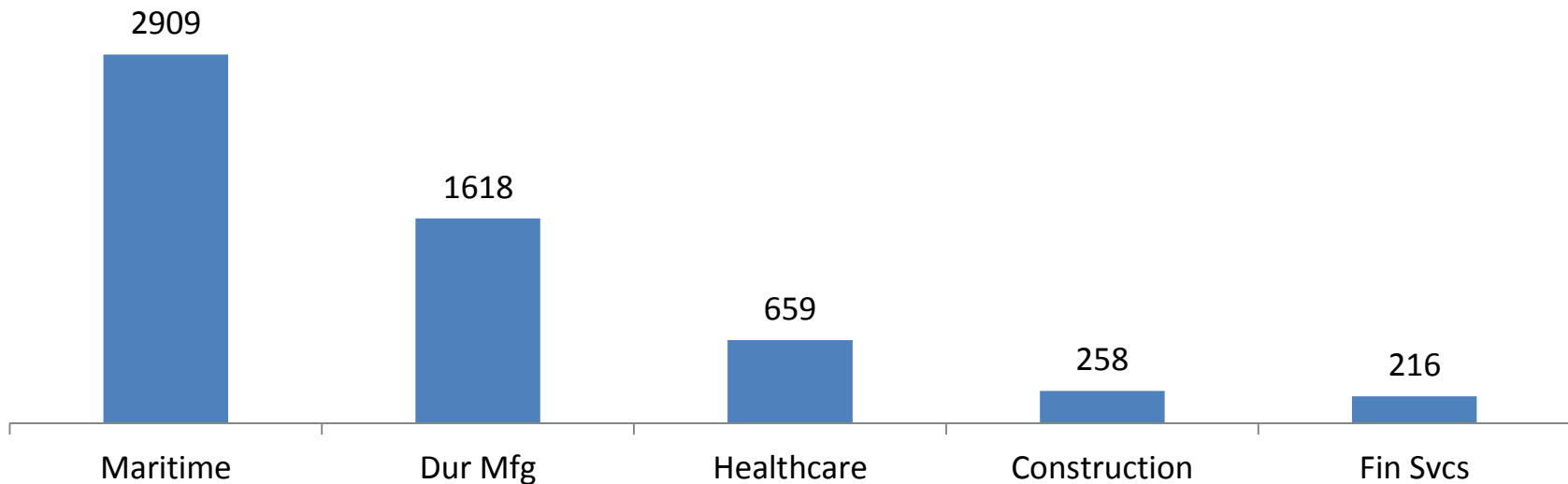
# City of Gloucester: Harbor Economic Implementation Recommendations 4/14/2014

## Quick Review of Economic Analysis

# Gloucester maritime economy represents roughly 1/3 of all jobs in the city

- Gloucester has a total employment base of approximately 10,000 jobs\*

Gloucester Employment by Key Industries & North Shore Critical Industries  
Adjusted ES202  
2012



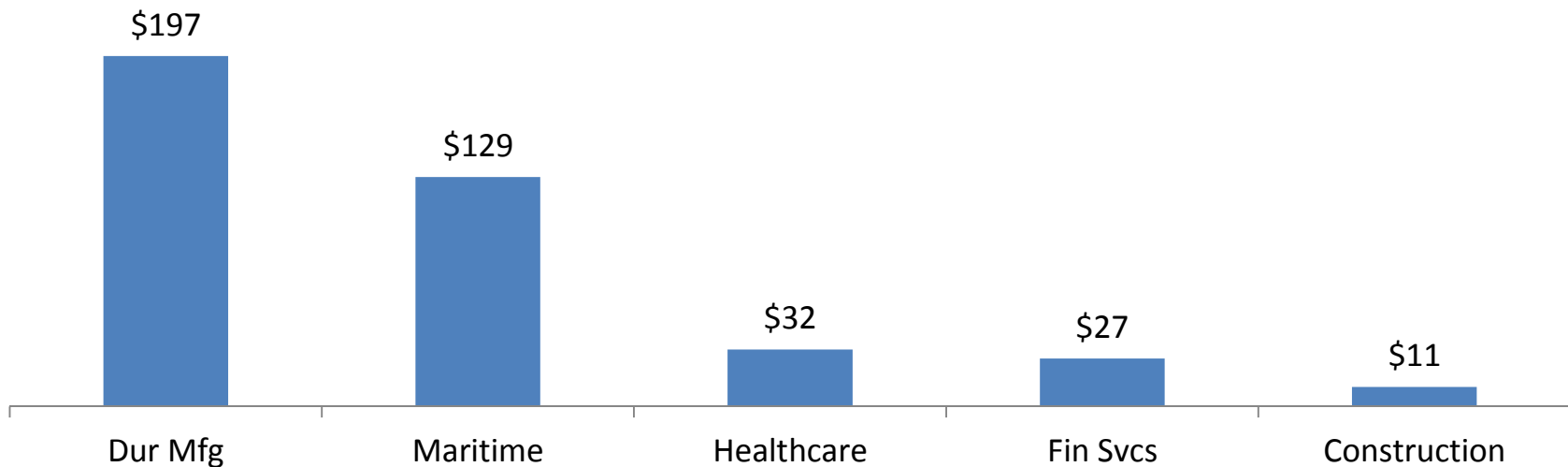
\* ES 202 data shows 9581 plus the adjustment made for fishermen increases employment data to 10142

Source: NP calculations from MASS LMI data

# Gloucester maritime economy represents approximately 21% of the total wage base of the city

- Gloucester has a total wage base of approximately \$609 million

Gloucester Wages by Key Industries & North Shore Critical Industries  
Adjusted 2012  
\$ millions

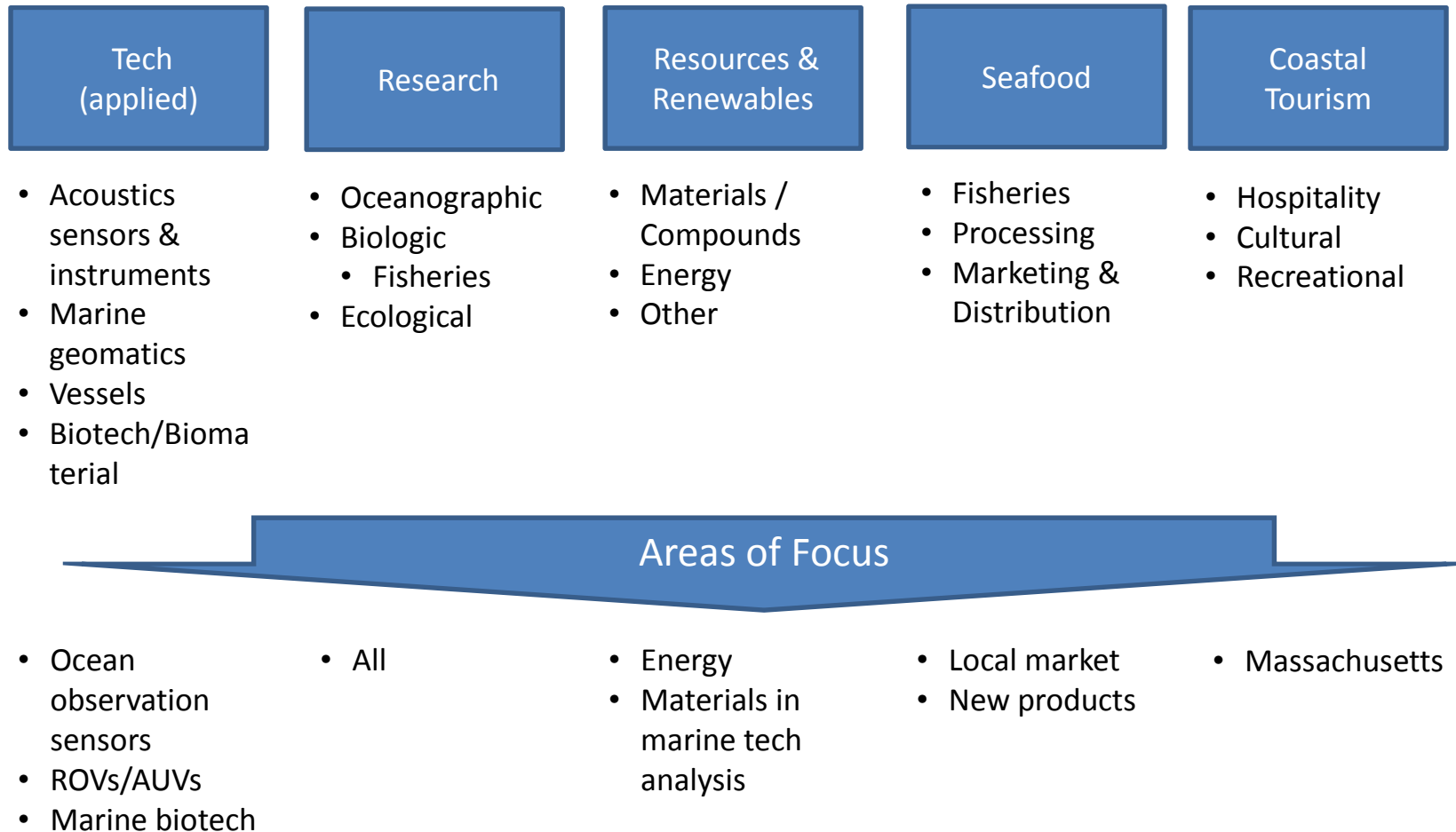


Source: NP calculations from MASS LMI data

## Sector Opportunities

### Recap

# Maritime economy industry segments



# Estimated market sizes

- The Maritime sector economy is at least \$10 billion before fisheries & seafood

Tech (applied) Global Mkt \$	Research US \$	Resources & Renewables	Seafood	Coastal Tourism
<ul style="list-style-type: none"> <li>• Ocean Observation: \$2.2 bill <ul style="list-style-type: none"> <li>• \$700 m US</li> </ul> </li> <li>• ROV/AUVs: \$3.2b 35 companies</li> <li>• Marine biotech: \$3.7 b <ul style="list-style-type: none"> <li>• Marine chitin: \$481m</li> <li>• Alginate: \$1.1b</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• \$2.5 billion in federal R&amp;D spending excluding Navy</li> <li>• NSF largest source: \$1.7b <ul style="list-style-type: none"> <li>• Mass = \$117m</li> <li>• Woods Hole: \$83m</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Energy: unknown</li> <li>• Closest proposed project is HyWind 12 megawatt project 12 miles off shore of Portland Maine covering 22 square miles</li> <li>• Finding of no competitive interest issued by Bureau of Ocean Energy Management in Dec 2012</li> </ul>	<ul style="list-style-type: none"> <li>• Total US: 4.5 billion pounds</li> <li>• Boston imports 2012: <ul style="list-style-type: none"> <li>• 470m lbs rail or truck</li> <li>• 11m by ship</li> </ul> </li> <li>• Serves processors, retail &amp; restaurants</li> </ul>	<ul style="list-style-type: none"> <li>• Mass: \$1.6 billion spend <ul style="list-style-type: none"> <li>• Barnstable</li> <li>• Essex</li> </ul> </li> </ul>

# Sector opportunities assessment

## Opportunistic

- Marine tech
- Marine research



- Lack of a major anchor plus established centers limits growth potential
- Gloucester's location coupled with a flexible/adaptive regulatory structure could create the right "serendipity"

## Target for Growth

- Marine biomaterials
  - Research
  - Translational science
  - Product mfg



- A current area of interest and investment by the private sector
- Differentiates from most existing marine science research in MASS

## Strengthen thru innovative product development

- Tourism
- Fisheries & Seafood



- It's a fundamental component of the city's economy
- Opportunities to stabilize & generate some growth through diversification



## Moving Forward

# Our charge is a municipal harbor plan – a physical planning product – we need to translate economic sectors to potential real estate uses

## Assessing market opportunities:

- Opportunistic
  - Marine tech
  - Marine research
- Target for Growth:
  - Marine biomaterials
    - Research
    - Translational science
    - Product mfg
- Strengthen thru innovative product development
  - Tourism
  - Fisheries/seafood



## Translation to MHP / Real Estate Programmatic Options

- Rebase 50/25 after DPA changes to determine level of flexibility for other sites
- Mixing tourism & fishing together: Gloucester Public Fish Pier:
  - Models:
    - Honolulu Fish Pier
    - Fishing Wharf – Wanchese
- I4C2 Flex building
  - Seafood product development
  - Fisheries technology development and manufacturing
  - Marine research with emphasis on linkage to seaside access

# Some Observations

## Review Process

- 2014 MHP analysis plus:
- Have reviewed all the recent documents and efforts
  - Port Recovery
  - I4C2 Planning Process
  - Maritime Economy Summits
  - Previous MHPs



## Observations

- Lots of ideas requiring additional definition and clarification
- No “vehicle” or entity to actually move ideas and projects forward
  - Personnel capacity “bandwidth” limitations
  - Seed capital
  - Existing vehicles may have limitations to move forward
- Infrastructure and real estate capacity issues not at forefront of discussion but are fundamental to achieving the vision espoused in the documents

# Three initial priorities

An “action”  
vehicle or  
organization

- A structure that can execute on various components of the different plans
- Could be a mix of entities from a revamped RDA , EDIC, CDC or potentially a port authority

A defined  
regulatory  
environment

- Zoning and parking
- “Development Box” determinations
- Setback and public access requirements
- Transfer of development rights

Infrastructure  
to match  
ambition

- Land assembly
- Water & sewer upgrades
- Communications bandwidth

*And an active approach to monitoring the Harbor’s economic activity  
across multiple dimensions*

# An “action” vehicle is needed

## Real Estate Development and Programming

- Executing real estate projects such as I4C2
- Providing development support and capital to other project such as creating a Pier 38 equivalent in Gloucester
- Could be an independent development corporation, city RDA or public private partnership structures

## Defining & Starting Initiatives

- Grant writing
- Advancing the programming of I4C2
- Defining and business planning e.g., the “Seafood Hub”
- Technical assistance program development identified in Port Recovery Plan
  - Could be done with a University or by engaging SeaGrant Mass

## Managing Financial Capital Resources

- Could be city revolving loan fund
  - Consideration would need to be given to flexibility of seeking additional sources of capital through the city revolving loan fund plus its underwriting requirements
- Could be independent development entity (like Worcester Industrial Development Corporation) that manages loan funds and capital programs

## Marketing

- Active marketing program of outreach, solicitation and response identified in Port Recovery Plan
- Pursuit of university partnerships at the institutional level for the Ocean Development Center
- Brand development through education and outreach programs

# A defined regulatory environment

## Zoning and Parking

- New zoning approach for east Gloucester
- Evaluate MI zoning with potential new approach to non Ch. 91 jurisdiction land
- Performance requirements on non-industrial uses
  - e.g., industrial zone notice requirements, soundproofing
- Parking requirements and mechanisms
  - Number of spaces required, mechanisms for meeting requirements
    - shared parking arrangements, valet, on-site

## Define the “Development Box”

- Maximum height limitation and relationship to flood plain elevation requirements
- View corridor requirements
- Setback and public access requirements
- Street level pedestrian connections with required elevations

## Land / Water Sheet Assembly & Disposition

- Transfer of development rights scheme
  - Determined by City Council
  - Considerations
    - Must remain within the DPA plan cap of 28% on industrial use
    - TDR bank to “escrow” TDRs prior to actual development
    - Identification of receiving and giving areas
    - Reflect in MHP
- MGL Ch. 121B process to include publicly owned parcels in the downtown as well to facilitate assembly and disposition

# Infrastructure to meet the ambitions

## Water / Sewer/Telecom Bandwidth

- Port Recovery plan Item 11 identifies issues surrounding sewer concerns but requires additional clarification to understand potential remedies
- Upgrading to ultra-high speed fiber capacity (10gbs+) to support proposed research activities due to their data intensity
  - Cape Ann-wide initiative

## Harbor Infrastructure

- Port Recovery plan identifies a number of issues with berthing, dredging, and maintenance issues
- Securing capital funds to improve piers, pilings, berths, etc.
  - Potential charge of “action entity”
- Potentially a tax stabilization scheme on harbor-side improvements

## Land / Water Sheet Assembly & Disposition

- Same as Regulatory Environment
  - Transfer of development rights scheme
  - MGL Ch. 121B process to include publicly owned parcels in the downtown as well

# Gloucester Harbor Dashboard

## Indicators of economic health for Maritime Sector

The key to these indicators is data that is easily obtainable (meaning readily collected) and have some “line of sight” to economic activity and economic value of the harbor and reflect the 3 key factors of the harbor economy (real estate asset investment; fishery activity; tourism levels)

### Suggested Metrics

- Fish landings by species
- Fishing vessel calls
- Property sales / property tax revenues
- Building improvement permits within DPA
- Seasonal local meals tax revenues
- Downtown summer parking revenues
- # of Moorings & utilization rates
- Public dockage & utilization rates
- Boat excise tax
- Cruise ship visits / passengers

And the derivative metric based on the levels of activity above:

- Marine economy sector job levels



# Observation: I4C2 Ocean Development Center

- Keep the building flexible to meet any potential need or demand will be critical



Schematic representation of I4C2 Ocean Development Center



NY State Energy Research Park Catalyst Building – Saratoga NY